

## LAND ROVER GROUP LTD.

EXECUTIVE ORDER A-277-0023 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODE YEAR				VEHICLE TYPE	EXHA STAND	AUST EMISSION PARD CATEGORY	FUEL TYPE						
2002		(T04.6001		3,751 - 5,750 Pounds Adjusted Loaded Vehicle Wedium Duty Vehicle	eight Low E	Emission Vehicle (LEV)	Gasoline						
No.	EVAPOR	EVAPORATIVE FAMILY (EVAP)		SPECIAL FEAT EMISSION CONTROL		* = not applicable	TWC = 3-way catalytic converter WUTWC = warm-up TWC ADSTWC = adsorber TWC OC = oxidation						
1	2LRXE01	24001	1	2TWC, 2HC	02S(2), AIR, SFI, OB	D (P)	catalytic converter O2S = oxygen sensor HO2S = heated O2S EGR = exhaust gas recirculation						
2	*	į	2		*		AIR = secondary air injection PAIR = pulsed AIR						
3	*		3		*	MFI = multiport fuel injection SFI = sequential MFI TC/SC = turbo/super charger CAC = charge air coole							
4	*		4		*	OBD (F) / OBD (P) = on-board diagnosis; full / partial compliance (prefix) 2 = parallel (2) (suffix) = serie							
EVAF No.	P ECS No.	ENGINI SIZE (L		VEHICLE MAKES & MODELS	VEHICLES SUB. STANDARDS AF	ABBREVIATIONS:							
1	1 1 4.0			Land Rover: Range Rover, Discovery Series II									
1	1	1 4.6		Land Rover: Range Rover									
*	*	*		. •									
*	*	*				*							

The exhaust and evaporative emission standards (STD) and certification emission levels (CERT) for the listed vehicles are as follows. Any debit in the manufacturer's compliance plan for "NMOG Fleet Average" (passenger cars and light-duty trucks) or "Vehicle Equivalent Credit" (medium-duty vehicles) shall be equalized as required. The 50° Fahrenheit standards and CERT levels are listed below or compliance has been met based on the manufacturer's submitted compliance plan in lieu of actual testing.

NMOG FLEET AVERAGE [g/mi]  ORAF = 0.94				CH4 = methane NMOG = non-CH4 organic gas NMHC = non-CH4 hydrocarbon CO = carbon monoxide NOx = oxides of nitrogen HCHO = formaldehyde PM = particulate matter RAF = reactivity adjustment factor													
CERT	STE	)	CH4 RA			co		NOx [g/mi]		HCHO [mg/mi]		P	PM [g/mi]		Hwy NOx [g/mi]		
*	*		CERT		STD	CERT STD		С	ERT	STD	CERT	STD	CER	T S	TD	CERT	STD
K = 1000 miles	@	50K	0	.118	0.160	1.5	4.4	0.1	0.1	0.4	3	18	*		*	0.02	0.8
	@ 1	20K	0	0.133 0.230		1.5	6.4	1	0.1	0.6	3	27	•		*	0.02	1.2
	@ 50°F	, 4K	0	.185	0.320	2.1	4.4	0.	0.1	0.4	2	36	*		•	*	*
CO @ 20	[g/mi] )°F, 50K			g = gram mg = milligr		NMHC+NOx [g/mi] (composite)			NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]			NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]	
CERT	RT STD			mi = mile		CERT	STD	C	ERT	STD	CERT	STD	CER	T S	TD	CERT	STD
4.9	12.5			@ 4K		*	*		*	*	* *		*	*		*	*
F = degree	Fahrenhe	it			@ 120K	*	*		*	*	*	*	*	<del> </del> -	*	*	*
<u>@</u>	EVAPORATIVE FAMILY 1				EVAPORATIVE FAMILY 2 E				EV	EVAPORATIVE FAMILY 3			EVAPORATIVE FAMILY 4				
120K	3-D	2-D		RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR
CERT	0.6	0.6		0.00	•	•	*	•	*	-	*	*	•	*		*	+
STD	2.0	2.5		0.05	*	*	*	*	*	•	*	*	*	*		*	+
2-D, 3-D [g/	test] = 2-d	ay, 3-d	lay d	liurnal a	ınd hot-soak		RL [g/mi]	= runnir	ng loss		ORVR [g/g	illon of fue	dispense	d] = on-b	oard ref	ueling vapo	or recoven

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 (labeling), 1968.1 or 1968.1(m)(6.2) (on-board diagnostic systems; full or partial compliance), 2035 et seq. (emission control warranty), 2235 (fuel tank fill pipes and openings), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations. The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this \_\_\_\_\_\_\_ day of July 2001.

R. B. Summerfield, Chief Mobile Source Operations Division